

## Department of Energy

National Nuclear Security Administration 1301 Clay Street Oakland, California 94612-5208 JUN 0 5 2062

Dr. Michael R. Anastasio Deputy Director for Strategic Operations Lawrence Livermore National Laboratory P.O. Box 808, L-005 Livermore, CA 94551-0808

Subject: Agreement for Safety Basis Development and Review Process

(Doc. # AMNSNST:010134)

Dear Dr. Anastasio:

The National Nuclear Security Administration (NNSA) Oakland Operations Office (OAK) has developed a concept for safety basis development and review process. This was developed as a result of lessons learned from past safety basis products and Los Alamos National Laboratory (LANL) safety basis product experiences. The enclosed concept tailors the development and review process for nuclear safety documents and exemption requests. The overall goal for both organizations is to achieve a high-quality document while minimizing the review comments and time.

OAK and LLNL agree to utilize the enclosed concept for the development and review of nuclear safety basis documents effective 30 days after signatures are completed.

Messa Australia LLXL
Dr. Michael Anastasio, LLXL

Michael Hooper, NNSA-DAK

6-10

\_\_\_\_\_6/4/02 Date

Date

Enclosure: Safety Basis Preparation and Review Process Agreement

Dr. M. Anastasio

#### cc:

- R. Beach, LLNL, L-005 (w/enclosure)
- R. Failor, LLNL, L-383 (w/enclosure)
- A. Garcia, LLNL, L-352 (w/enclosure)
- J. Jackson, LLNL L-382 (w/enclosure)
- S. Nguyen, LLNL, L-375 (w/enclosure)
- H. Wong, LLNL, L-375 (w/enclosure)

### SAFETY BASIS PREPARATION AND REVIEW PROCESS AGREEMENT

**Purpose:** Formalize the NNSA/OAK and LLNL interactions associated with the nuclear safety basis preparation and review process for 10CFR830 compliant DSAs and TSRs.

Background: With the codification of 10CFR830, Subpart B, nuclear safety basis documents are being revised to be fully compliant with the rule. Different safety basis preparation and review processes are used throughout the DOE Complex for nuclear safety documentation. Much of the preparation and review process is tailored to the understanding and capabilities of the contractor team. Both NNSA/OAK and the contractor strive for minimizing the preparation and review time while producing a high quality product. After evaluating the alternatives, NNSA/OAK and the Laboratory have agreed upon the following process as shown in Attachment 1. Note that some compliance reviews are currently underway, the NNSA/OAK review team leader in conjunction with the Laboratory contact may have agreed upon an alternate preparation and review process dependent upon the circumstances and quality of the documentation.

Concept: The process begins with a joint scoping meeting that describes the key objectives and accomplishments for the Documented Safety Analysis (DSA)/Technical Safety Requirements (TSR) to achieve. The scoping meeting would be documented and clearly identify the expectations, criteria, task description/plan<sup>1</sup>, results and a conflict resolution process. The scoping meeting documentation would be signed by an individual from the Laboratory and NNSA/OAK representing both operations/program and nuclear safety. Changes to the scoping meeting agreements must go through a formal change control process.

Following the initial scoping meeting the Hazards Analysis, Accident Analysis and key chapters of the DSA will be prepared. During this effort, working meetings between NNSA/OAK and LLNL may be established to resolve larger issues. The working meetings would occur on a set frequency designed to discuss high level issues. As work proceeds, summary meetings will be held to present the progress on hazards analysis, accident analysis (if appropriate)<sup>2</sup> and possibly TSRs. Issues raised in the scoping, working and summary meetings that must be addressed in upcoming sections of the document would be formally tracked and worked. The intent of the working sessions would be to work larger issues and build consensus between NNSA/OAK and the Laboratory.

Once the DSAs and TSRs are complete LLNL would perform an internal independent review prior to submitting the document to NNSA/OAK, at which time NNSA/OAK would conduct a formal review with written comments. If NNSA/OAK determines that severe quality problems exist such that the fundamental conclusion that the DSA's compliance with 10CFR830 and associated requirements cannot be assured, the review may be suspended and the document returned to LLNL for revision. NNSA/OAK and

\_

<sup>&</sup>lt;sup>1</sup> Task plan/description should cover key inputs and assumptions that would be used in the preparation including the methodology, modeling usage, resources, schedules and hold points.

<sup>&</sup>lt;sup>2</sup> Based on the facility hazard categorization

LLNL would also have discussions regarding the NNSA/OAK concerns with the document. The NNSA/OAK Review Team Leader would provide to the Laboratory a clear statement of the fundamental issues that must be addressed in the revision and a new submittal date will be negotiated.

Comments by NNSA/OAK would be designated as Required, Suggested or Educational. Comments designated as "Required" mean that these indicate a comment points out where the DSA or TSRs are not in compliance with 10CFR830 or related requirements. These comments will indicate which element of the NNSA/OAK compliance checklist or the specific requirement is not met by the DSA or TSRs. Comments designated as "Suggested" mean addressing these comments would improve the DSA or TSRs. "Suggested" comments are optional and are not required to be addressed for the compliance review. Comments designated as "Educational" mean questions arose during the review where additional information is needed by NNSA/OAK staff to understand the text or document flow. After the questions are addressed if additional changes to the DSA or TSRs are needed they will be designated either "Required" or "Suggested".

Prior to formal issuance of the written comments, NNSA/OAK and LLNL would meet to discuss the comments informally. This meeting would be designed to "bin" any Educational comments and to provide clarifying information that may result in the quick resolution or re-binning of a comment. If the commentor and Lab agree, comments could be removed entirely. However, the intent of the binning meeting would be to agree on the bin type.

Following this meeting, comments would be formally issued by NNSA/OAK. Depending upon the number and significance of the comments a joint meeting followed by working sessions (with or without NNSA/OAK) would be utilized to disposition comments. Once comments had been adequately addressed, the revised safety document would be submitted for final approval with the agreed upon comment dispositions. This process was modeled after successful examples elsewhere in the DOE Complex and how NNSA/OAK and LLNL worked through the USQ procedure resolution process.

The overall objective is to efficiently produce initial documents that generate few NNSA/OAK comments. NNSA/OAK is expected to be intensively involved in the scoping, planning and comment resolution/disposition stages, however continuous involvement by NNSA/OAK is not desirable. To be successful with this model, NNSA/OAK reviews and Lab closure can be further streamlined by ensuring the following conditions:

- NNSA/OAK Team is an appropriate number of individuals graded to the size and complexity of the DSA and topical areas that have changed
- NNSA/OAK Team members do not change over time or throughout the process thereby potentially introducing new comments/revisions
- NNSA/OAK comments would be prioritized into three types: Required (R), suggested (S) or educational (E) using the standard DOE Review Comment Record (RCR) form.

- NNSA/OAK comments need to be formalized forcing the commentor to clearly describe his/her concern and providing the Lab with the defined issue to address. A reference to the OAK compliance checklist or the specific requirement will also be included with each Required comment
- NNSA/OAK comments will be informally sent to the Lab prior to the "binning" meeting.
- Both parties will make an effort to "bin" Educational comments into either Required or Suggested at the binning meeting prior to formal issuance. Every effort should be made to not prolong the "binning" meeting but focus only on those issues that can be resolved quickly. The outcome from the binning meeting would be the revised bins for the finalized comments ready for formal transmittal by NNSA/OAK to LLNL.
- Laboratory dispositions to the comments are documented to ensure closure with the NNSA/OAK reviewer. Specific text changes and the location of the proposed modification (if applicable) will also be included.
- NNSA/OAK Required comments must be dispositioned prior to re-submittal. There should be no educational comments remaining following the initial meeting if "binning" has occurred.
- Once a comment has been closed, it may not be reopened for further discussion unless new data warrants it. Agreed upon dispositions may not be modified either.
- The goal is for the Lab to disposition the "Required" comments in a single cycle.
- Strong Quality Assurance checks need to be completed by the Laboratory on the dispositions.

The degree of OAK involvement would be tailored based upon how new the document is, complexity of the change and the amount of revision that is required. However, in all cases a scoping meeting would be necessary to ensure expectations would be met. Development and degree of review would be handled on a case-by-case basis using the existing tools (docket) for identifying and tracking the Nuclear Safety workload.

Conflicts or differences of opinion would be resolved using the resolution process identified in the review plan, the resolution process identified in the OAK Supplemental Directive or through working meetings with the next level of management and as applicable the approval authority. Efforts should be made by all parties to resolve issues at the lowest level possible.

# ATTACHMENT 1 - PROPOSED LLNL SAFETY BASIS PREPARATION & REVIEW PROCESS\*

\*- steps may be graded dependent upon the degree of change, newness of the document and maturity of the safety programs

#### Joint Working Meetings (not high level) Proposed set listed below **TSR** AA Summary **HA Summary** Summary Meeting\* Meeting\* Meeting\* **Joint** Chapters Accident Programmatic Scoping Hazards 3,4,5& **Analysis** Meeting/ Analysis Chapters (AA) **TSRs** Task Plan\* (HA) Internal Binning Independent Meeting Review **Joint** Disposition Revised Session **Joint** OAK Formal OAK Final Doc Comment Comments Document Comments < to OAK Transmitted Scoping prepared to DOE Lab Disposition Joint effort between DOE and Lab DOE Laboratory effort approves DOE effort DSA/TSRs